Government Collaboration Panel:
Keys to Overcoming Global Food Security Challenges

An International (Research &) Development, Geospatial Information Needs Perspective

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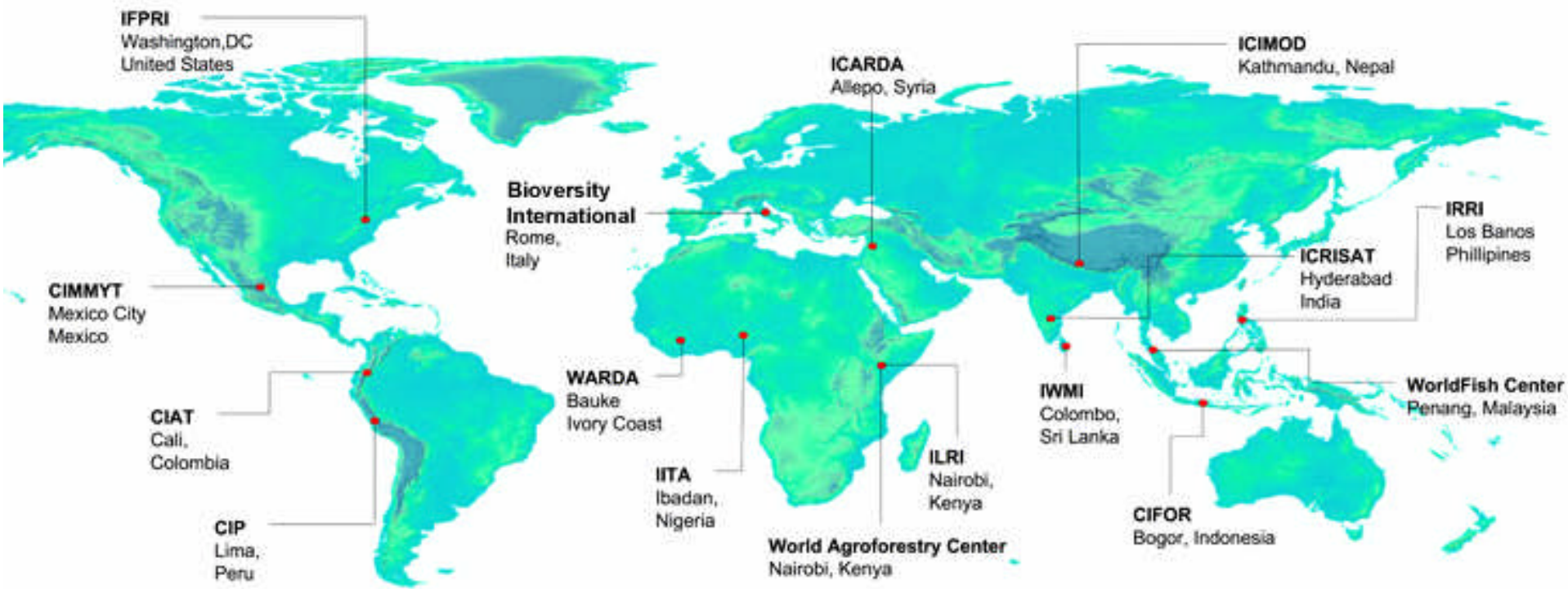
USDA-FAS *"Global Food Security Challenges: Monitoring Earth Resources Summit"*
April 22, 2009
Ronald Reagan International Convention Center, Washington DC

Overview

- The international agricultural R4D community
- The key, escalating role of monitoring earth resources in improving the effectiveness of agricultural development and humanitarian strategies, policies, and investments
- An urgent plea for continued and increased support and partnership in monitoring earth resources for agricultural development purposes as a major contribution to accelerating and enhancing humanitarian, economic growth & security outcomes

Consultative Group for International Agricultural Research (CGIAR)



- > 2,000 scientists
- 100 countries
- > US$500 million p.a. for agricultural R4D
- Alliance of 64 governments, private foundations, and international and regional organizations.

www.cgiar.org

INTERNATIONAL FOOD
POLICY RESEARCH INSTITUTE
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- **IFPRI's Mission**

  To Provide Policy Solutions That Reduce Poverty and End Hunger and Malnutrition

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- **301 staff members**

  (DC based, 84 senior research staff, 25 are out-posted, mainly in SSA)

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The Global Food Crisis: Responses

IFPRI work on to the
The Global Food (& Financial) Crisis:
Diagnosis & Proposed Responses

The World Food Situation: New Driving Forces & Required Actions. Food Policy Report. December 2007.

Global Food Crises: Monitoring & Assessing Impact to Inform Policy Response. Food Policy Report. September 2008.

Food and Financial Crises: Implications for Agriculture and the Poor. December 2008.

When Speculation Matters. Issue Brief. February 2009.

Implementing Physical and Virtual Food Reserves to Protect the Poor & Prevent Market Failure. Issue Brief. February 2009.

Policy Responses NOT to Choose to Deal with High Prices

Not:

- Export stops (starving your neighbor)
- Food subsidies for vocal middle class
- Slow change in outdated production control policies
- Continued public underinvestment in agriculture productivity increases
- Exclusion of agriculture from climate change mitigation strategies

Joachim von Braun, IFPRI, February 2008

Policy Responses to Surging Biofuel Demand

Global trade regime with transparent biofuel standards

Criteria to internalize all + & - effects of biofuels

1. Slow down on biofuels with inappropriate technology and at the wrong locations (because of environment and the poor)
2. Accelerate agriculture productivity investments and R&D broadly and in appropriate biofuels

Joachim von Braun, IFPRI, February 2008

Source: IEA 2004, Henniges 2005.

Pro-poor Responses to Adapt to and Mitigate High Food Prices

1. Developed countries

- Eliminate agricultural **trade** barriers,
- expand / re-visit aid priorities for **agriculture and rural services**, incl. social protection

2. Developing countries

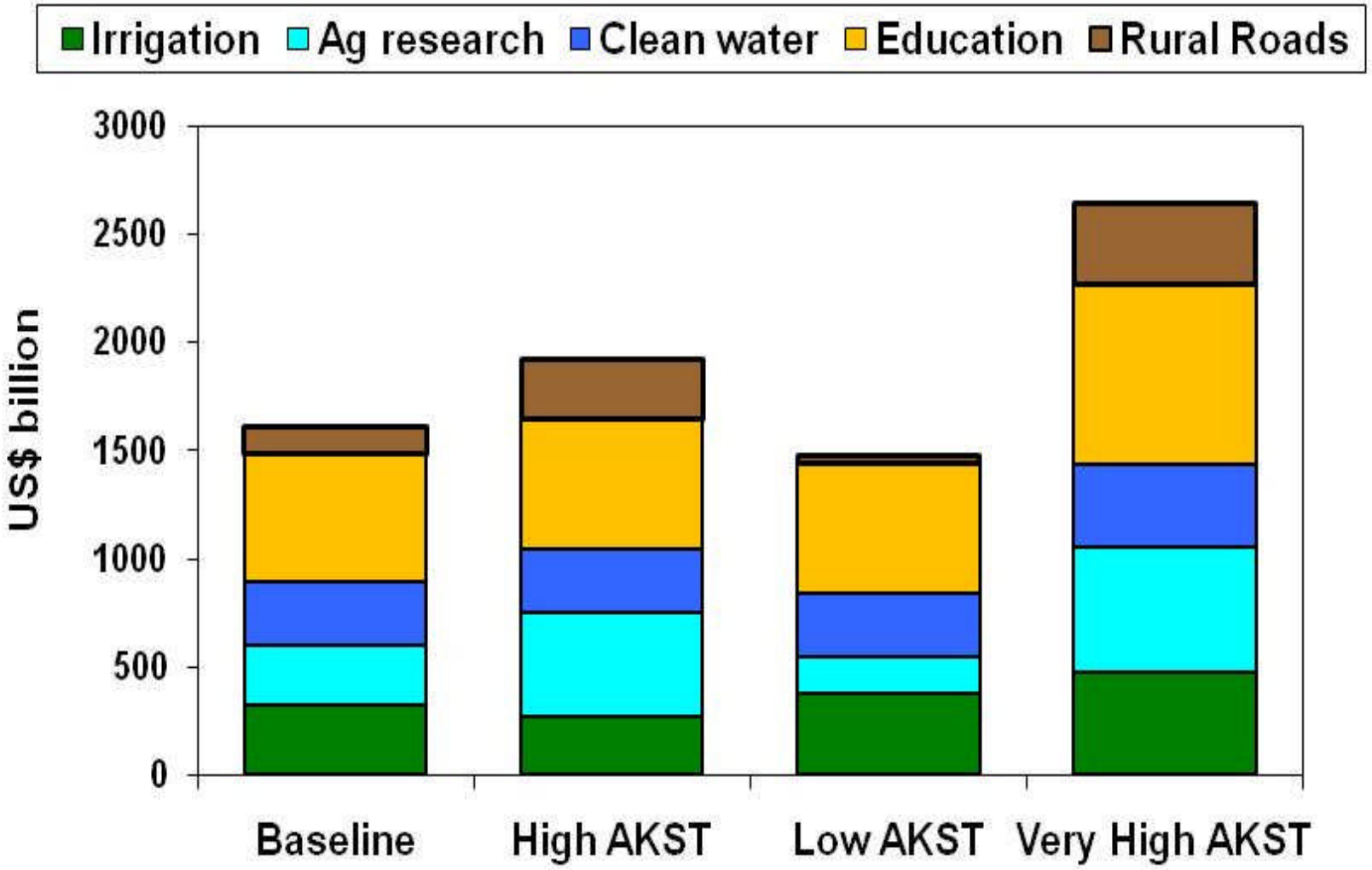
- Increase investment in agriculture, rural infrastructure and market access for small farmers
- Expand **social protection** (rural and urban) for the poorest

3. Science and Technology (CGIAR and NARS)

- Facilitate production response by agriculture science- and technology-based solutions (China, India, Africa)

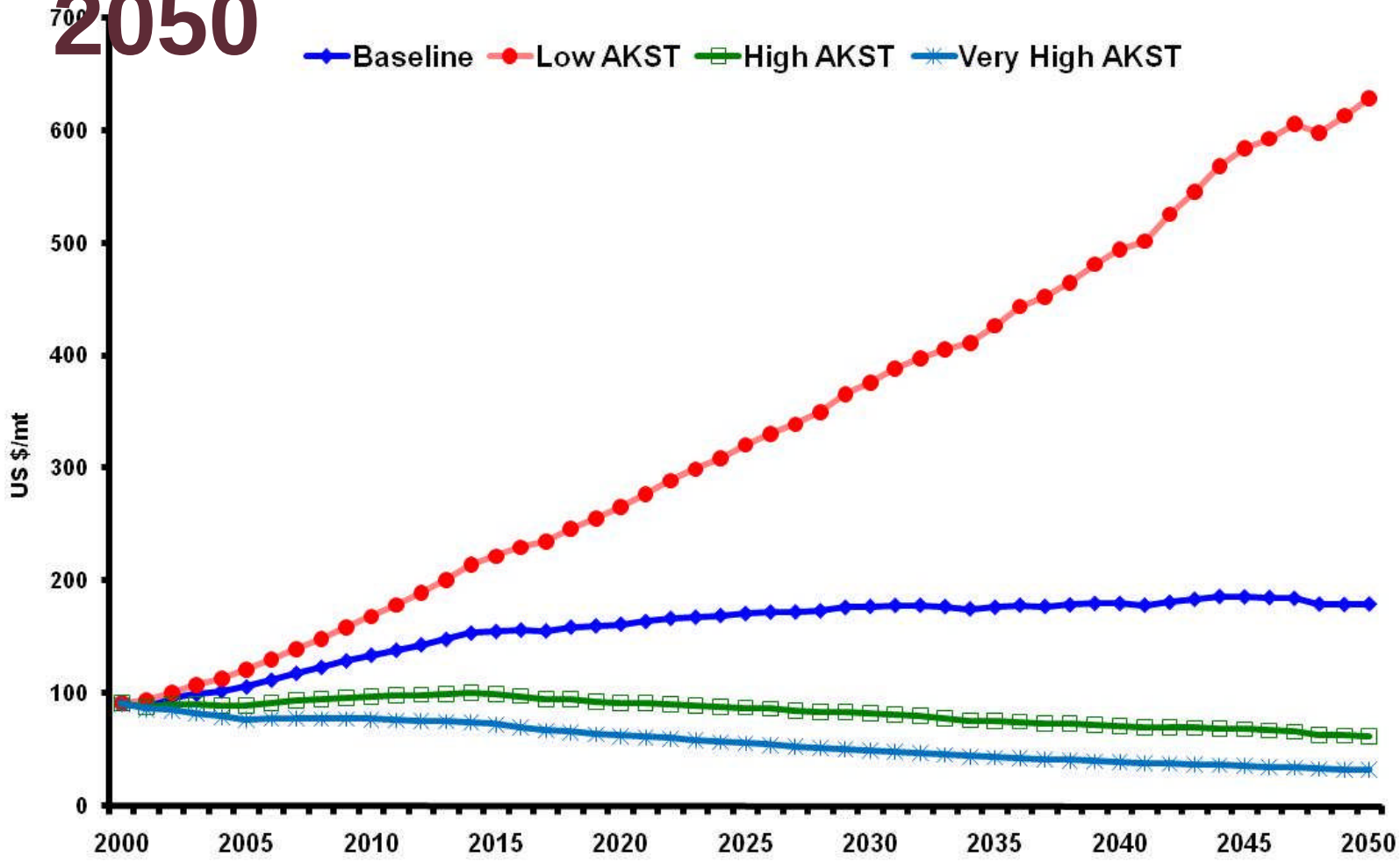
Joachim von Braun, IFPRI, February 2008

Some Alternate Investment Scenarios



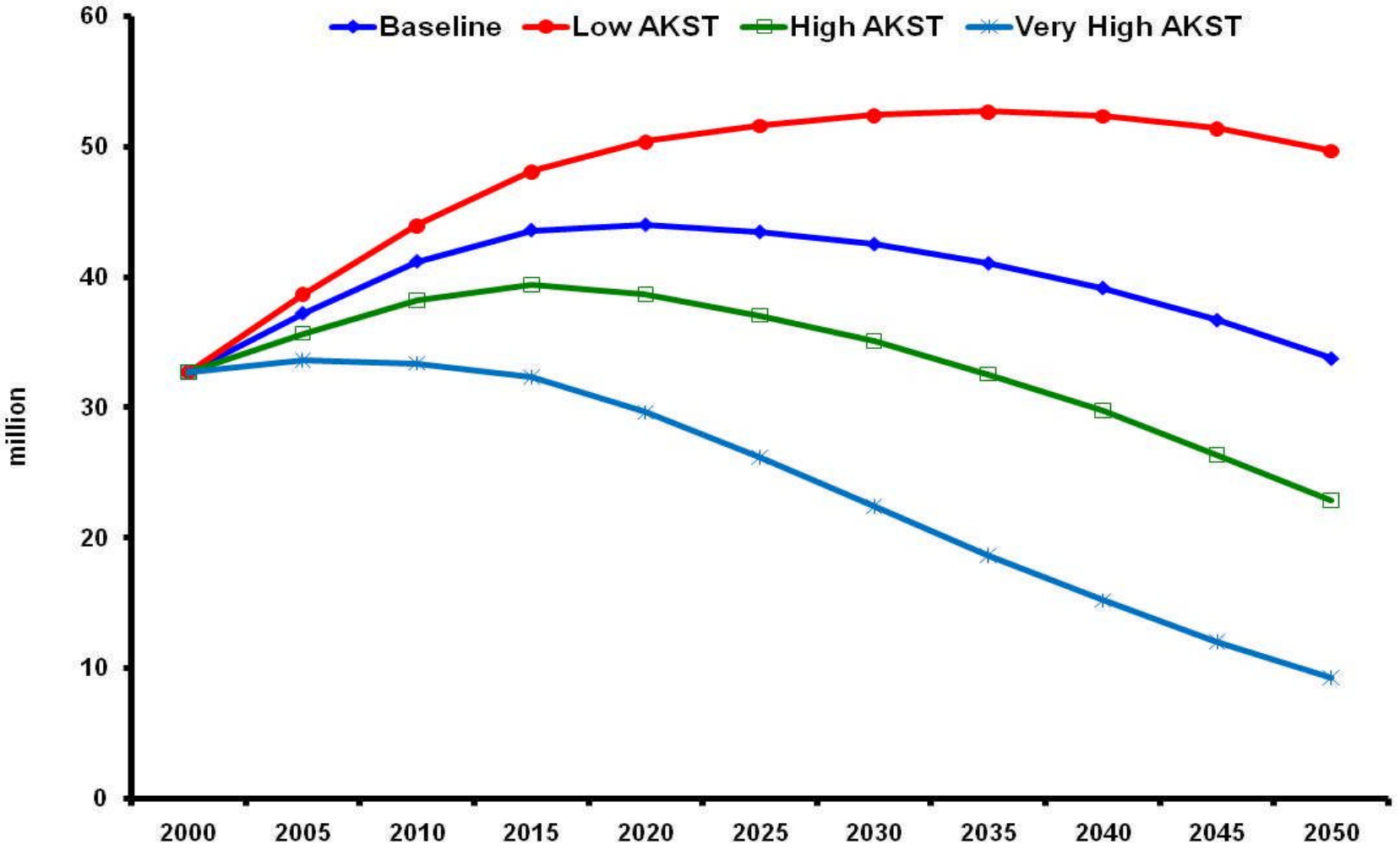
Source: IFPRI IMPACT simulations, April 2008
for the International Ag. Assessment (IAASTD)

Global Maize Price, 2000-2050

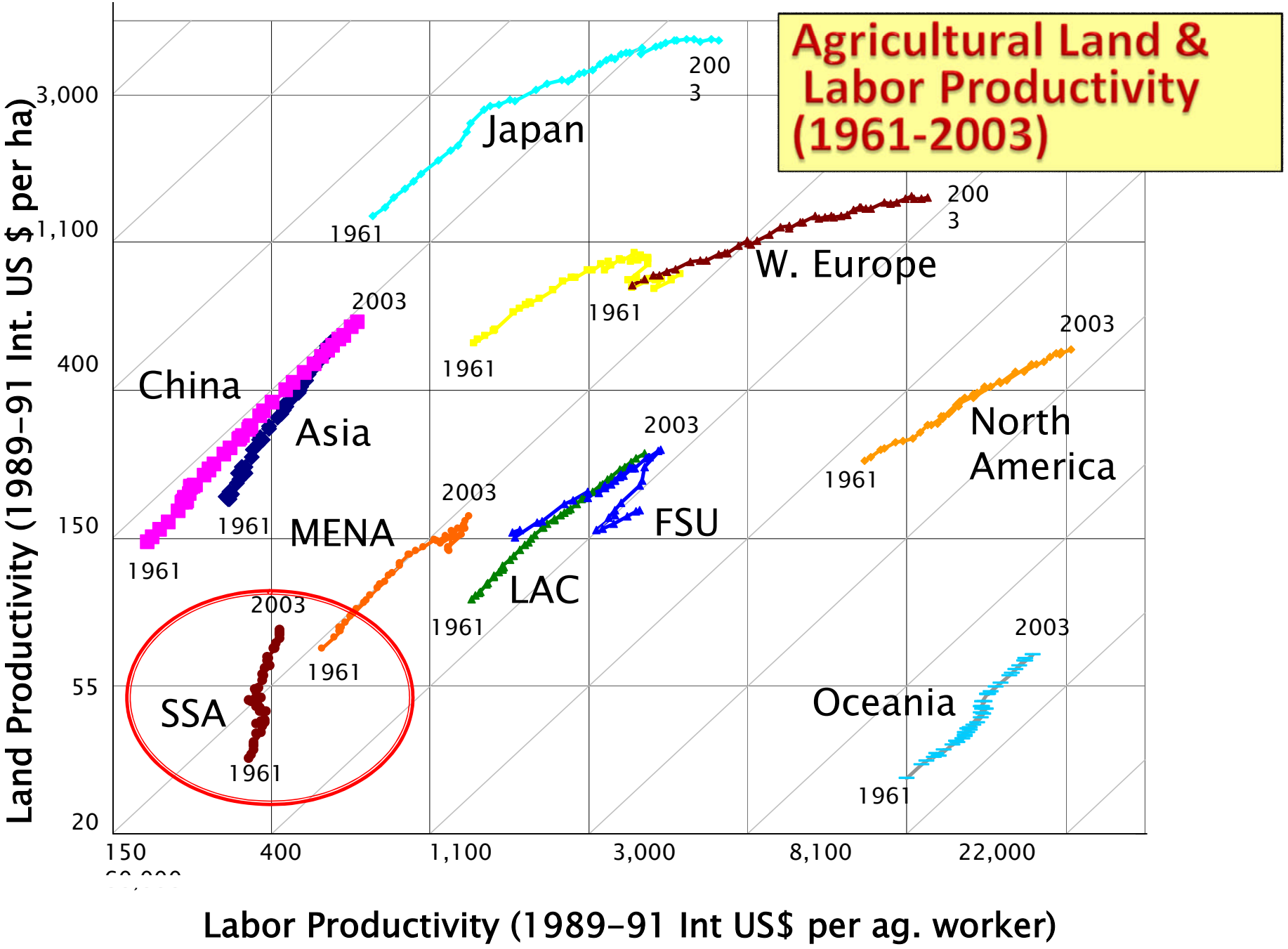


Source: IFPRI IMPACT simulations, April 2008

Malnourished Children in Sub-Saharan Africa, 2000-2050



Source: IFPRI IMPACT simulations, April 2008


Agricultural Land & Labor Productivity (1961-2003)
Land Productivity (1989-91 Int. US $ per ha)
Labor Productivity (1989-91 Int US$ per ag. worker)
3,000
1,100
400
150
55
20
150
400
1,100
3,000
8,100
22,000
Japan
1961
2003
W. Europe
1961
2003
China
1961
2003
Asia
1961
2003
MENA
1961
2003
FSU
1961
2003
LAC
1961
2003
North America
1961
2003
SSA
1961
2003
Oceania
1961
2003